

APPENDIX C

ENVIRONMENTAL COMMITMENTS

In addition to the management actions described as part of the alternatives, the following mitigation actions are considered to be commitments being made by the Bureau of Reclamation.

Air

- The Reclamation would require air quality control measures in construction specifications for any proposed development actions under all the alternatives.

Soils

- During construction planting grasses, forbs, trees and shrubs or placement of riprap, sand bags, jute, sod, erosion mats, bale dikes, mulch, or excelsior blankets would decrease erosion.
- Clearing schedules would be arranged to minimize the practical exposure of soils.
- Final erosion control and site restoration measures would be initiated as soon as an area is no longer needed for construction, stockpiling, or access.
- Short-term effects such as increased land or shoreline erosion in or near recreation sites would be minimized by adhering to Best Management Practices (BMPs) during construction.

Water Quality

- Expand the reservoir water quality and sediment sampling program. Review the need for routine testing of fish flesh for concentrations of contaminants for pesticides and heavy metals, and minimize chemical mosquito control methods.

Vegetation

- The use of native species or non-invasive species is recommended for revegetation efforts to maximize the potential to restore revegetated areas to high quality habitat
- Construction specifications would require contractors to preserve the natural landscape and prevent any unnecessary destruction, scarring, or defacing of the natural surroundings in the work vicinity.

- Critical environmental areas (i.e., stream corridors, wetlands, riparian areas, Ute ladies'-tresses orchid and gray cryptantha habitat, and steep slopes) would not be used for construction equipment or material storage or stockpiling; construction staging or maintenance; or temporary access roads.
- Upon the completion of construction, any land disturbed but not permanently occupied by new facilities would be graded to provide proper drainage and blend with the natural contours of the land, covered with topsoil stripped from construction areas, and revegetated with plants native to the area and beneficial to wildlife.
- The final recommended composition of plant species, seeding rates, and planting dates would be determined in consultation with the WDFW and USFWS (where applicable or appropriate). .
- Uplands would be revegetated to the native vegetative community appropriate for the site's soil type, topographic position, and elevation.

Wildlife

- Efforts will be made to attempt to restore native plant "communities".
- More aggressive weed control plans, above and beyond simply noxious weed control measures, should benefit native plant communities.
- The development of new campgrounds, boat launches, interpretive trails, etc. should take place in areas which minimize adverse impacts to fish and wildlife.
- Special signage, seasonal road closures, firearms or shooting restrictions, and some vegetation management are measures which may improve conditions for Washington ground squirrels near Lind Coulee
- Bald eagles roosts and regular perch sites could be protected with access restrictions.
- Interpretive information could be developed to educate the public on the valuable and unique habitats and associated unique species present and measures being employed to protect them.

Fish

- Prior to any construction or bank stabilization projects, site-specific erosion and sediment control measures would be identified and incorporated into the project's construction specifications, reducing sediment delivery to the reservoir.

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- Construction sites would be revegetated and riparian areas near shorelines would be planted with trees and shrubs to provide shade and habitat for fish and near-shore wildlife.
 - Projects built below the reservoir high water line would be timed for construction to occur when the reservoir pool is at its lowest elevation to avoid damage to fish spawning and rearing habitat caused by the release of sediment into the reservoir or increases in turbidity.
 - Short-term effects such as increased shoreline erosion in or near construction sites would be minimized by adhering to Best Management Practices (BMPs) during project construction.
 - During final layout and site design, measures to minimize asphalt surface runoff and the potential for pollutants (e.g., oil) entering the reservoir would also be identified and incorporated into the design.
 - Herbicides used for the control of Eurasian water milfoil and purple loosestrife would be selected for their low toxicity to aquatic wildlife and fish.

TES Species

- In consultation with the USFWS, mitigation measures would be developed to minimize adverse impacts where appropriate, to special status species and habitats regardless of the alternative selected.

Cultural

- All identified cultural resources are recorded and mapped to professional standards.
- Whenever possible, cultural resources will be avoided during project implementation.
- Conduct Class III surveys and prepare a Cultural Resource Management Plan (CRMP).
- Coordinate with Native Americans with interests at Potholes Reservoir to prepare the CRMP and manage cultural resources.

Monitoring

Mitigation actions for some adverse impacts could include restoration of native vegetation in various portions of the project area. Restoration efforts under mitigation should be tied to monitoring and success criteria. That is, if initial restoration actions fall short of goals, additional actions would be necessary. Monitoring plans will be incorporated into the mitigation measure to look at effectiveness of the measure and adaptive management to pursue.